

# Work Order ID 119219

Tuesday, May 13, 2014 12:33:24 PM

\*119219\*

Page 1

Item ID: D212-722-013

Accept

\*N900040100\*

Setup Start \*NS1\*

Revision ID:

Stop \*NS2\*

Item Name: Fastener Brace

Start Date: 5/15/14 Start Qty: 1.00 \*1\*

Cust Item ID:

Required Date: 5/16/14 Req'd Qty: 1.00 \*1\*

Customer:

Reference:

Approvals: Process Plan: MA Date: 14-05-13 Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start \*NR1\*

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
DSI 9476	A

100	Document Control	0.00
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\*100\*

DC

Memo

0.00

Doc.Control -USB or Paperwork

Photocopie DSI 9476 and labels per PPP D212-722-013 CHG001

MAY 14 2014

DAS  
06  
9-89

110	Pick Kit	0.00
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\*110\*

Packaging

Memo

0.00

Packaging

DAS  
33 14-05-13  
9-89

120	QC4- 100% Inspect kits for completeness	0.00
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\*120\*

QC

Memo

0.00

Quality Control

MAY 14 2014

DAS  
06  
9-89

DAS  
28  
9-89

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <table style="width:100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

### FAULT CATEGORY

<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge  <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other  _____ _____ _____
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**Work Order ID 119219**

Tuesday, May 13, 2014 12:33:24 PM

**\*119219\***

Page 2

Item ID: D212-722-013

Accept

**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Fastener Brace

Start Date: 5/15/14 Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 5/16/14 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start **\*NR1\***

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130		0.00							
<b>*130*</b>									
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP D212-722-013								
	Location: <u>030</u>								
	PPP rev: _____								
140	QC21 - Final Inspection - Work Order Release	0.00							
<b>*140*</b>									
QC	Memo	0.00							
Quality Control									

DAS  
06  
9-89

MAY 14 2014

MLJ

14-05-15

MLJ 14-05-15

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

Work Order: _____  Part No. _____  NCR No. _____				<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>		<b>AGAINST DEPARTMENT/PROCESS</b>  <div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/>            Machining <input type="checkbox"/>            Thermoforming <input type="checkbox"/>            Large Fab <input type="checkbox"/> </div> <div>           Crosstube <input type="checkbox"/>            Small Fab <input type="checkbox"/>            Finishing <input type="checkbox"/>            Composite <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/>            Prod. Eng. Coord. <input type="checkbox"/>            Rec/Store/Packaging <input type="checkbox"/>            Supplier <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/>            Quality <input type="checkbox"/>            Other <input type="checkbox"/> </div> </div>					
Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Design											
Doc/Data											
Equip/Tooling											
Handling/Pre											
Material											
Operator											
Offset/Setup											
Process											
Supplier											
Training											
Transport											
Unapproved											

FAULT CATEGORY												
<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube			<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function			<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence			<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge		<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other	

# Picklist Print

Tuesday, May 13, 2014 12:33:29 PM

Page 1

Work Order ID: 119219

\*119219\*

Parent Item: D212-722-013

\*D212-722-013\*

Parent Item Name: Fastener Brace

Start Date: 5/15/14

Required Date: 5/16/14

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP revA 11.06.21 new issue EC verified by:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3986-1 Angle *D3986-1*		Manufactured	No			110	Each	7.0000	**	1		DAS 33 9-89	DAS 28 9-89
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST081		7							
				84644		7				84644			
D3986-3 Brace *D3986-3*		Manufactured	No			110	Each	22.0000	**	2		DAS 33 9-89	14-05-13
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST081		22							
				113042		22				113042		DAS 28 9-89	

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

### FAULT CATEGORY

<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other
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# DART SERVICE INSTRUCTION

## TO AMEND INSTALLATION INSTRUCTIONS IIN-D212-722 REV. A

REF. TCCA STC: SH05-11  
REF. FAA STC: SR02091NY  
REF. EASA.IM.R.S.01181

The purpose of the Service Instruction is to provide instructions for the installation of the D212-722-013 Dzus Rail Brace Kit which has been developed to provide a fastening method for the center dzus rail when the D212-722-011 Avionics Riser Console is installed. The D212-722-013 kit has been added to all D212-722-011 kits at CHG 003 or later.

If the aircraft pedestal has been removed from the aircraft follow the instructions in Option 1. If the pedestal has not been removed from the aircraft follow instructions in Option 2 (Sheet 2).

The maximum weight of equipment installed in front of the D212-722-011 Avionics Riser Console using the D212-722-013 Kit is 40 lbs.

**Option 1** - Install D212-722-013 Dzus Rail Brace Kit as follows if pedestal has been removed from aircraft:

Note: The existing PR35 center dzus rails will need to be removed and re-worked to the correct length in order to install the D212-722-013 Dzus Rail Brace Kit.

**CAUTION: Alignment of the parts is critical to a successful installation. It is strongly recommended that the parts be clamped together before drilling and then clecoed together before riveting.**

- 1) Remove the rivets securing the existing center PR35 dzus rails.
- 2) Remove the existing center dzus rail braces.
- 3) Clamp the D3986-1 angle, D3986-3 braces and PR35 dzus rail together as shown in Figure 1 (Sheet 3). The D3986-3 braces should be approximately centered between the existing dzus rails.
- 4) Install blanking plates (Figure 5, Sheet 7) to position the PR35 dzus rails in the correct position.
- 5) Transfer drill 9x  $\varnothing 0.129$  (#30 drill) holes from PR35 dzus rail thru D3986-3 braces. See Figure 2, (Sheet 4), Note 1.
- 6) Deburr holes and reassemble using clecos.
- 7) Transfer drill 4x  $\varnothing 0.129$  (#30 drill) holes from D3986-3 braces to D3986-1 angle. See Figure 2, (Sheet 4), Note 2.
- 8) Deburr holes and reassemble using clecos.
- 9) Transfer drill 4x  $\varnothing 0.129$  (#30 drill) holes from aircraft pedestal to D3986-3 braces. See Figure 2, (Sheet 4), Note 3.
- 10) Deburr holes, dimple D3986-3 brace and aircraft pedestal and reassemble using clecos.
- 11) Transfer drill 4x  $\varnothing 0.129$  (#30 drill) holes from D3986-1 angle to aircraft pedestal. See Figure 2, (Sheet 4), Note 4.
- 12) Deburr holes, dimple D3986-1 angle and aircraft pedestal and reassemble using clecos.
- 13) Re-install blanking plates (Figure 5, Sheet 7) and verify correct position of PR35 dzus rails.
- 14) Install MS20470AD4 and MS20426AD4 rivets as shown in Figure 2 (Sheet 4) in the same order as the holes were drilled, maintaining the PR35 dzus rail position.

CANADA  
DEPARTMENT OF TRANSPORT  
AIRCRAFT CERTIFICATION  
BRANCH  
DAO # 01-O-01

APPROVED

BY: *D. Shepherd*  
D. SHEPHERD (DE # 02)

DATE: 11.06.01  
CERT. NO.: SH05-11  
ISSUE NO.: 1

A	NEW ISSUE	11.06.01
REV.	DESCRIPTION	BY DATE
DESIGN		
DRAWN		
CHECKED		
MFG. APPR.	N/A	
APPROVED		
DE APPR.		
DATE	11.06.01	
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA		
DRAWING NO. DSI 9476		REV. A
TITLE DZUS RAIL BRACE KIT		SHEET 1 OF 7
SCALE		NTS
COPYRIGHT © 2011 BY DART AEROSPACE LTD. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.		

**Option 2** - Install D212-722-013 Dzus Rail Brace Kit as follows if pedestal has not been removed from aircraft:

Note: The existing PR35 center dzus rails will need to be removed and re-worked to a correct length in order to install the D212-722-013 Dzus Rail Brace Kit.

**CAUTION: Alignment of the parts is critical to a successful installation. It is strongly recommended that the parts be clamped together before drilling and then clecoed together before riveting.**

- 1) Remove the rivets securing the PR35 center dzus rails from the existing dzus rail brace. Remove dzus rail.
- 2) Without removing it, trim the existing left dzus rail brace, as shown in Figure 4 (Sheet 6). Trim the existing right dzus rail brace 2.25" longer. See Note 1 Figure 4 (Sheet 6).
- 3) Trim D3986-3 braces so that when matched with the existing dzus rail braces the original D3986-3 length is maintained.
- 4) Clamp and cleco the D3986-1 angle, the trimmed D3986-3 braces and PR35 dzus rail together as shown in Figure 3 (Sheet 5).
- 5) Install blanking plates (Figure 5, Sheet 7) to position the PR35 dzus rails in the correct position.
- 6) Transfer drill  $\varnothing 0.129$  (#30 drill) the necessary holes (4 typ) from PR35 dzus rail thru D3986-3 braces. See Figure 3, (Sheet 5), Note 1.
- 7) Deburr holes and reassemble using clecos.
- 8) Transfer drill 4x  $\varnothing 0.129$  (#30 drill) holes from D3986-3 braces to D3986-1 angle. See Figure 3, (Sheet 5), Note 2.
- 9) Deburr holes and reassemble using clecos.
- 10) Transfer drill 4x  $\varnothing 0.129$  (#30 drill) holes from D3986-1 angle to aircraft console. See Figure 3, (Sheet 5), Note 3.
- 11) Deburr holes, dimple D3986-1 angle and aircraft console and reassemble using clecos.
- 12) Re-install blanking plates (Figure 5, Sheet 7) and verify correct position of PR35 dzus rails
- 13) Install MS20470AD4 and MS20426AD4 rivets as shown in Figure 3 (Sheet 5) in the same order as the holes were drilled, maintaining the PR35 dzus rail position.

## WEIGHT AND BALANCE

Compliance with this DSI has no effect on the aircraft weight and balance.

## PARTS LIST






QTY. -013	PART NUMBER	DESCRIPTION
X	D212-722-013	DZUS RAIL BRACE KIT
1	D3986-1	ANGLE
2	D3986-3	BRACE

CANADA  
DEPARTMENT OF TRANSPORT  
AIRCRAFT CERTIFICATION  
BRANCH  
DAO # 01-O-01

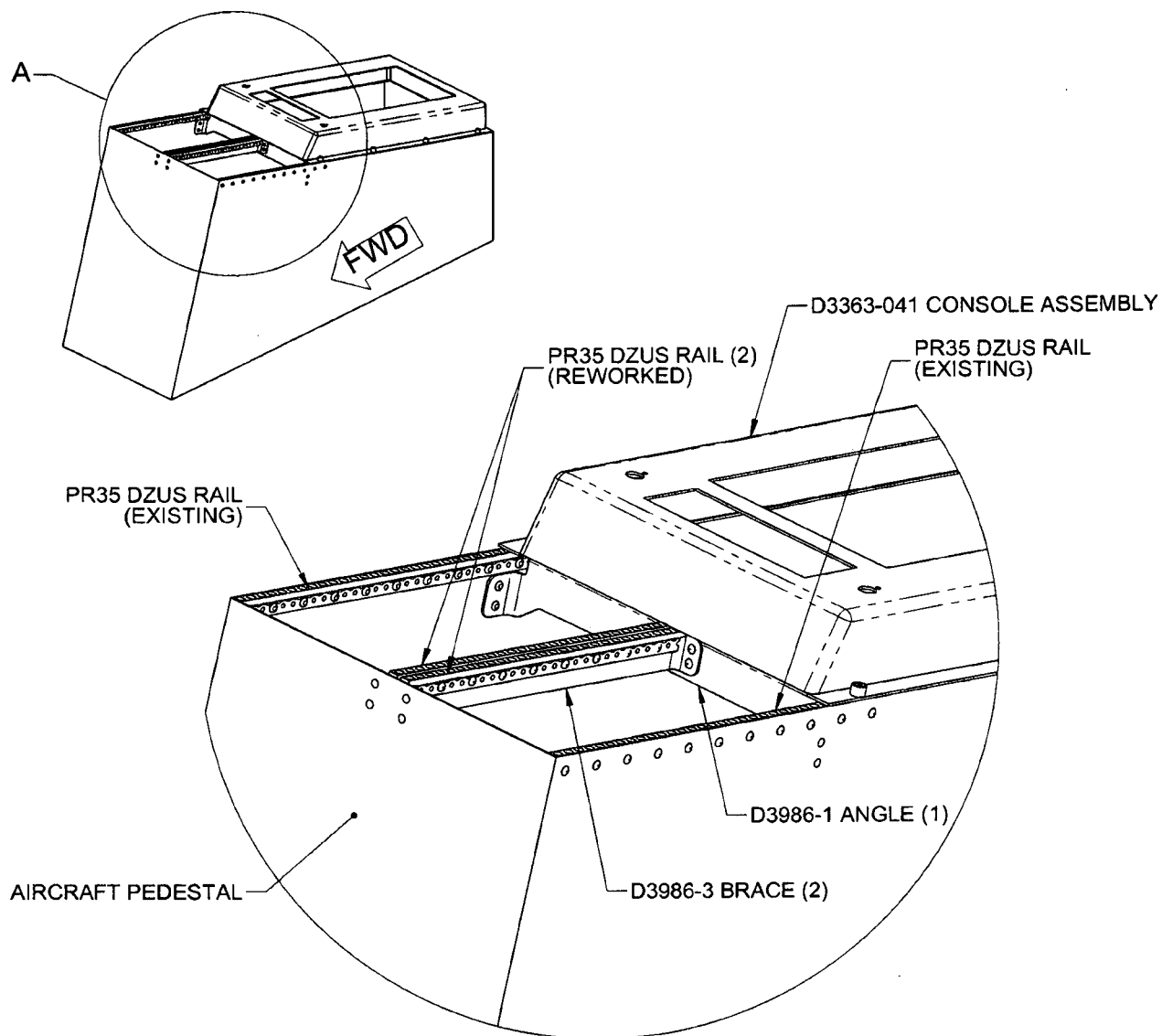
APPROVED

BY:   
D. SHEPHERD (DE # 02)

DATE: 11.06.01  
CERT. NO.: SH05-11  
ISSUE NO.: 1

DESIGN		<b>DART AEROSPACE LTD</b>	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9476	SHEET 2 OF 7
APPROVED		TITLE	SCALE
DE APPR.		DZUS RAIL BRACE KIT	NTS
DATE	11.06.01	COPYRIGHT © 2011 BY DART AEROSPACE LTD <small>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	





# **DETAIL A**

**FIGURE 1: D212-722-013 DZUS RAIL BRACE INSTALLATION**

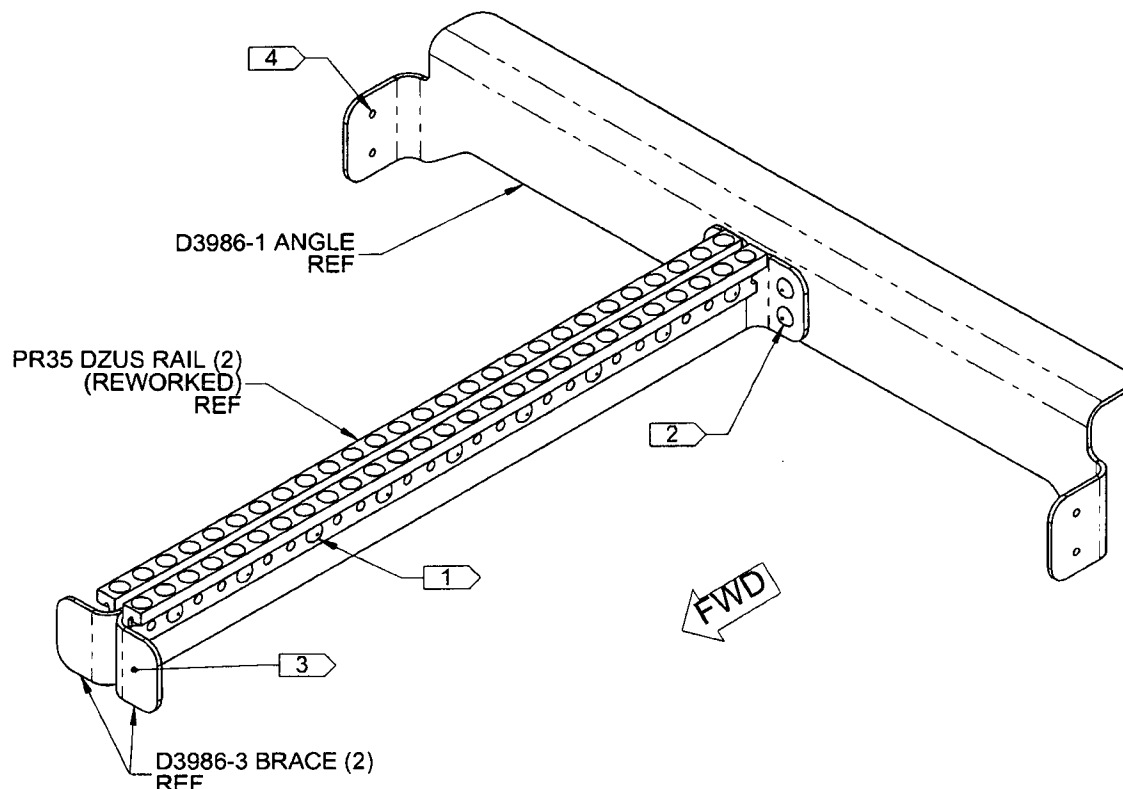
CANADA  
DEPARTMENT OF TRANSPORT  
AIRCRAFT CERTIFICATION  
BRANCH  
DAO # 01-O-01

**APPROVED**

BY: *[Signature]*  
D. SHEPHERD (DE # 02)

DATE: 11.06.01  
CERT. NO.: SH05-11  
ISSUE NO.: 1

DESIGN	<i>[Signature]</i>	<b>DART AEROSPACE LTD</b>	
DRAWN	<i>[Signature]</i>	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9476	SHEET 3 OF 7
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	DZUS RAIL BRACE KIT	NTS
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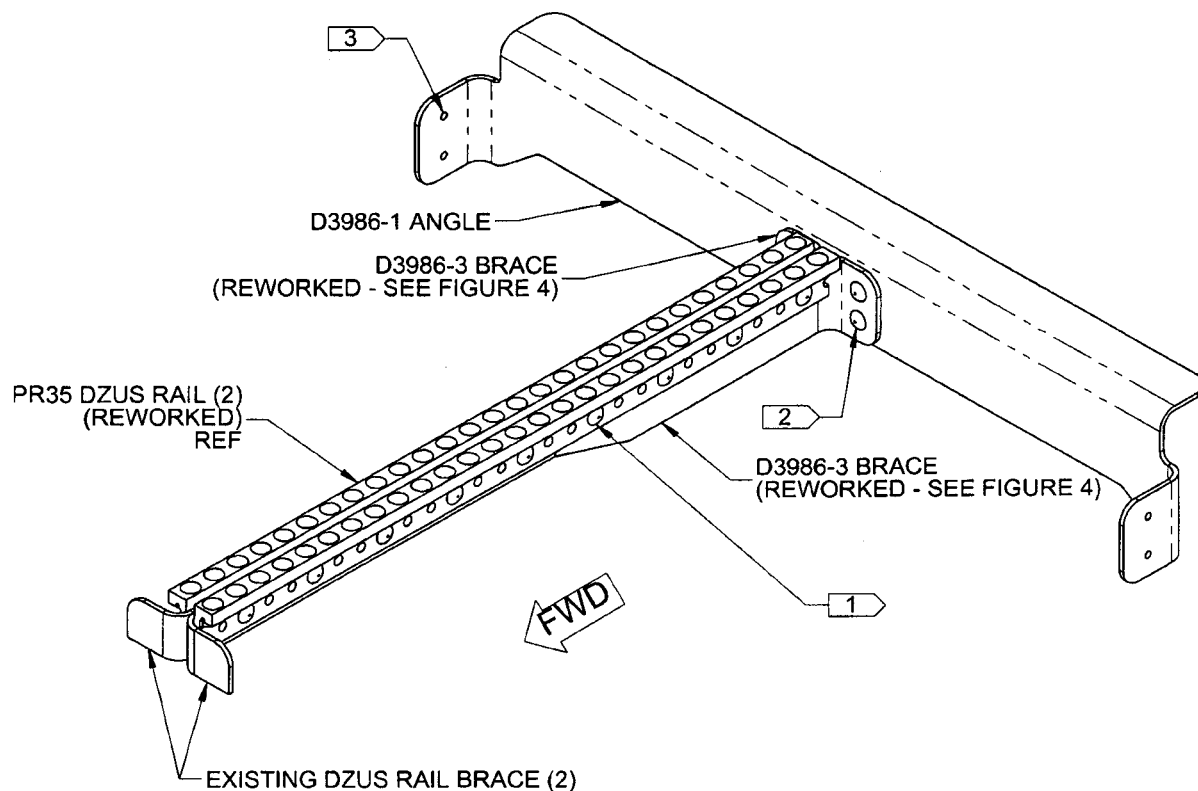


- 1) CONFIRM THAT DZUS RAIL AND BRACE ARE IN CORRECT POSITION AND TRANSFER DRILL  $\varnothing 0.129$  (#30 DRILL) FROM PR35 DZUS RAIL THRU D3986-3 BRACES. INSTALL MS20470AD4 RIVETS, 9 PL TYP
- 2) CONFIRM THAT DZUS RAIL AND BRACE ARE IN CORRECT POSITION AND TRANSFER DRILL 4X  $\varnothing 0.129$  (#30 DRILL) HOLES FROM D3986-3 BRACE TO D3986-1 ANGLE. INSTALL MS20470AD4 RIVETS, 4 PL
- 3) CONFIRM THAT DZUS RAIL AND BRACE ARE IN CORRECT POSITION AND TRANSFER DRILL 4X  $\varnothing 0.129$  (#30 DRILL) FROM AIRCRAFT CONSOLE TO D3986-3 BRACES. DIMPLE D3986-3 BRACES AND INSTALL MS20426AD4 RIVETS, 4 PL.
- 4) CONFIRM THAT DZUS RAIL AND BRACE ARE IN CORRECT POSITION AND TRANSFER DRILL 4X  $\varnothing 0.129$  (#30 DRILL) FROM D3986-1 ANGLE TO AIRCRAFT CONSOLE. DIMPLE D3986-1 ANGLE AND AIRCRAFT CONSOLE AND INSTALL MS20426AD4 RIVETS, 4 PL

**FIGURE 2: D212-722-013 DZUS RAIL BRACE INSTALLATION - OPTION 1**  
(PEDESTAL REMOVED FROM AIRCRAFT)

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	D. SHEPHERD (DE # 02)
DATE:	11.06.01
CERT. NO.:	SH05-11
ISSUE NO.:	1

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- 1) CONFIRM THAT DZUS RAIL AND BRACE ARE IN CORRECT POSITION AND TRANSFER DRILL (4 PL TYP)  $\varnothing 0.129$  (#30 DRILL) FROM PR35 DZUS RAIL THRU D3986-3 BRACES. INSTALL MS20470AD4 RIVETS, 9 PL TYP
- 2) CONFIRM THAT DZUS RAIL AND BRACE ARE IN CORRECT POSITION AND TRANSFER DRILL 4X  $\varnothing 0.129$  (#30 DRILL) HOLES FROM D3986-3 BRACE TO D3986-1 ANGLE. INSTALL MS20470AD4 RIVETS, 4 PL
- 3) CONFIRM THAT DZUS RAIL AND BRACE ARE IN CORRECT POSITION AND TRANSFER DRILL 4X  $\varnothing 0.129$  (#30 DRILL) FROM D3986-1 ANGLE TO AIRCRAFT CONSOLE. DIMPLE D3986-1 ANGLE AND AIRCRAFT CONSOLE AND INSTALL MS20426AD4 RIVETS, 4 PL






**FIGURE 3: D212-722-013 DZUS RAIL BRACE INSTALLATION - OPTION 2**  
(PEDESTAL NOT REMOVED FROM AIRCRAFT)

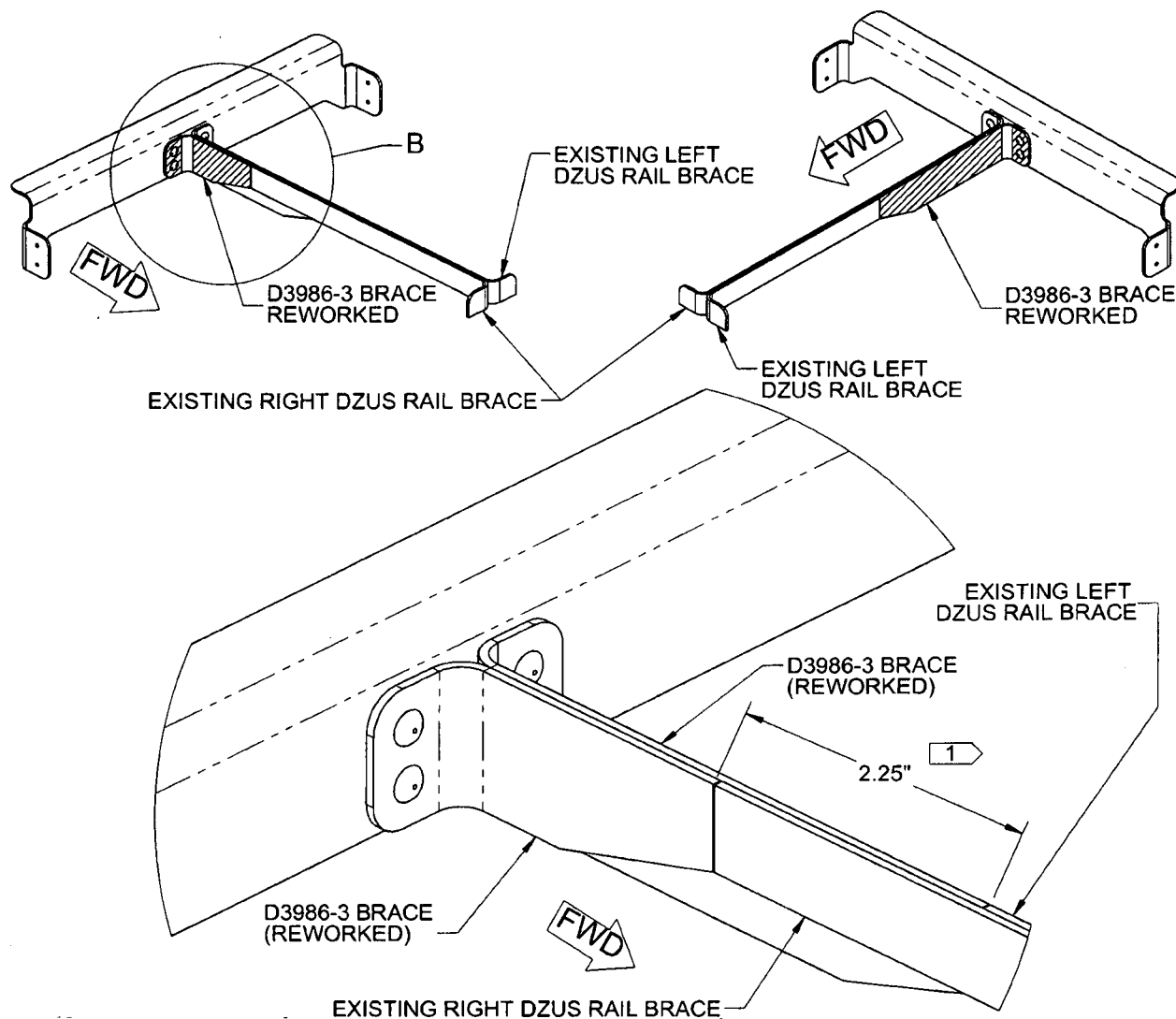
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**DETAIL B**

- 1) TRIM EXISTING LEFT DZUS RAIL BRACE SO THAT THE END IS HALF WAY BETWEEN EXISTING RIVET HOLES. TRIM EXISTING RIGHT DZUS RAIL BRACE 2.25" LONGER

**FIGURE 4: EXISTING DZUS RAIL BRACE TRIMMING DETAIL - OPTION 2**  
(REWORKED DZUS RAILS AND RIVETS NOT SHOWN FOR CLARITY)

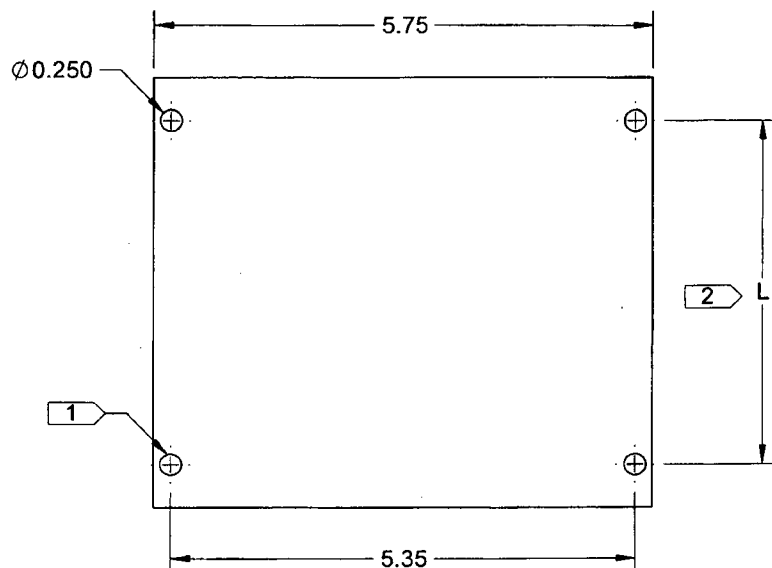
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- 1) INSTALL DZUS FASTENERS, 4 PL TYP
- 2) DIMENSION "L" IS MIN 4". MUST BE DIVISIBLE BY 0.375

**FIGURE 5: BLANKING PLATE**

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MAY 14 2014

**Option 2 - Install D212-722-013 Dzus Rail Brace Kit as follows if pedestal has not been removed from aircraft:**

**Note:** The existing PR35 center dzus rails will need to be removed and re-worked to a correct length in order to install the D212-722-013 Dzus Rail Brace Kit.

**CAUTION: Alignment of the parts is critical to a successful installation. It is strongly recommended that the parts be clamped together before drilling and then clecoed together before riveting.**

- 1) Remove the rivets securing the PR35 center dzus rails from the existing dzus rail brace. Remove dzus rail.
- 2) Without removing it, trim the existing left dzus rail brace, as shown in Figure 4 (Sheet 6). Trim the existing right dzus rail brace 2.25" longer. See Note 1 Figure 4 (Sheet 6).
- 3) Trim D3986-3 braces so that when matched with the existing dzus rail braces the original D3986-3 length is maintained.
- 4) Clamp and cleco the D3986-1 angle, the trimmed D3986-3 braces and PR35 dzus rail together as shown in Figure 3 (Sheet 5).
- 5) Install blanking plates (Figure 5, Sheet 7) to position the PR35 dzus rails in the correct position.
- 6) Transfer drill  $\varnothing 0.129$  (#30 drill) the necessary holes (4 typ) from PR35 dzus rail thru D3986-3 braces. See Figure 3, (Sheet 5), Note 1.
- 7) Deburr holes and reassemble using clecos.
- 8) Transfer drill 4x  $\varnothing 0.129$  (#30 drill) holes from D3986-3 braces to D3986-1 angle. See Figure 3, (Sheet 5), Note 2.
- 9) Deburr holes and reassemble using clecos.
- 10) Transfer drill 4x  $\varnothing 0.129$  (#30 drill) holes from D3986-1 angle to aircraft console. See Figure 3, (Sheet 5), Note 3.
- 11) Deburr holes, dimple D3986-1 angle and aircraft console and reassemble using clecos.
- 12) Re-install blanking plates (Figure 5, Sheet 7) and verify correct position of PR35 dzus rails
- 13) Install MS20470AD4 and MS20426AD4 rivets as shown in Figure 3 (Sheet 5) in the same order as the holes were drilled, maintaining the PR35 dzus rail position.

## WEIGHT AND BALANCE

Compliance with this DSI has no effect on the aircraft weight and balance.

## PARTS LIST

QTY. -013	PART NUMBER	DESCRIPTION
X	D212-722-013	DZUS RAIL BRACE KIT
1	D3986-1	ANGLE
2	D3986-3	BRACE

CANADA  
DEPARTMENT OF TRANSPORT  
AIRCRAFT CERTIFICATION  
BRANCH  
DAO # 01-O-01

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